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۱o.	Sponsor	Function Title	Location	Time
118	ADC20	Addressing Data and Integration Issues for U.S. Environmental Protection Agency MOVES Model	H - Georgetown East	Sunday, 8:30 AM–12:00 PM
119	ABJ40	Application of Passenger Travel Data for National, State, and Local Congestion Performance Measurement	H - Jefferson East	Sunday, 8:30 AM–12:00 PM
172	ABJ20	Recommended Revisions to AASHTO Guidelines for Traffic Data Programs	H - Jefferson West	Sunday, 1:30 PM-5:00 PM
	AB000	Policy and Multimodal Groups New Chair Orientation	S - Calvert	Sunday, 4:00 PM-6:30 PM

Click a function title to retrieve details.

No. Sponsor Function Title

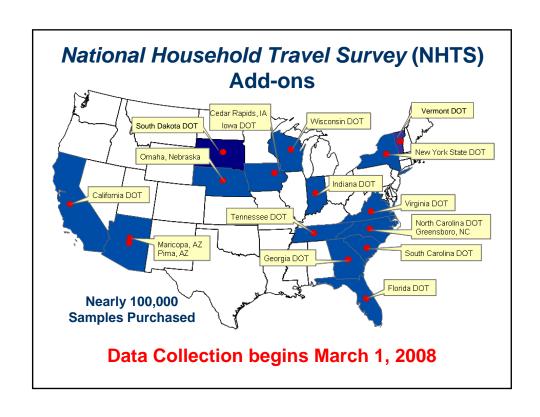
Addressing Data and Integration Issues for U.S. Environmental Protection Agency MOVES Model

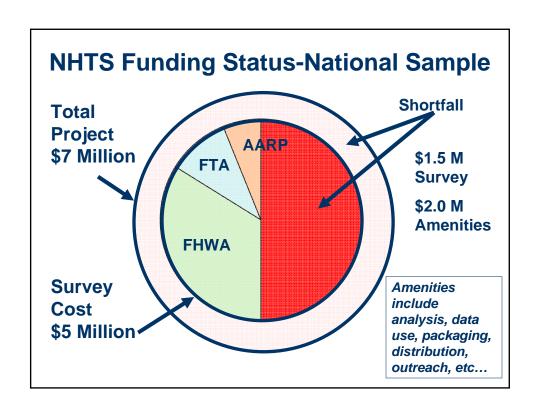
Joon Byun
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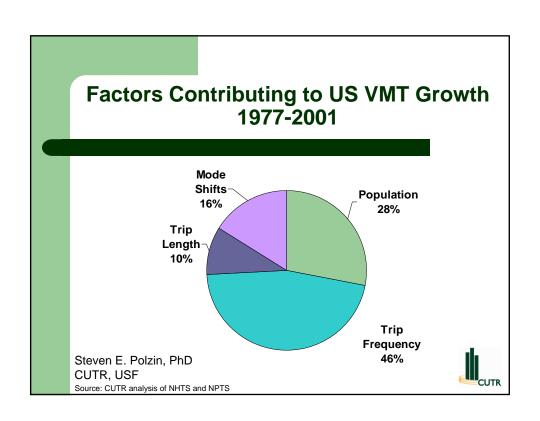
Application of Passenger
Travel Data for National,
State, and Local Congestion
Performance Measurement

Heather Contrino
NHTS Project Manager
FHWA Policy Information Office
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Heather.Contrino@dot.gov

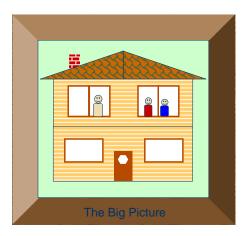
http://nhts.ornl.gov/







### **Integrating Activity & Performance Data**



Joseph L. Schofer Northwestern University

- Data integration adds value, obscures sources
- Integration is more than simultaneous analysis
- Activity view + network view = insights
  - Causality, action guidance
- Data linking strategies
  - Temporal association
    - Macro: general relationships
  - Geographic association
    - Micro: specific relationships
      - Location detail
      - Privacy issues

### **Using NHTS to Help Evaluate Performance Measures**

### Understanding the causes of congestion...

- Congestion is not just about the work trip, more than half of am peak travel is not related to work
- The non-work trips are dominated by serve passenger (80% to take children to school) and school trips, but other purposes add more miles during the peak
- Retired people are going to the doctor, people in household with kids are taking them to school, and men are shopping/getting a meal during the peak
- And both higher-income workers and lower-income nonworkers are over represented in peak non-work travel

Nancy McGuckin Travel Behavior Analyst AB000 Groups New Chair Orientation

AW000 Policy, Planning and AW000 Multimodal Groups Chairs Dinner (Members Only)

**2009 Annual Meeting Spotlight Theme Energy & Climatic Change** 

New for 2008 – paid Exhibits (140 organizations and sold out space)

### **2008 Annual Meeting**

Program Summary	2004	2005	2006	2007	2008
Lectern Sessions	498	470	469	455	453
Poster Sessions	46	65	88	134	114
Workshops	62	62	73	79	86

Paper Summary	2006	2007	2008	
Total Number Received	2862	3070	<b>284</b> 7	
Total Presented	1688 (59%)	1849 (60.2%)	1759 (61.8%)	
Papers in Lectern Session	888 (52.6%)	935 (50.5%)	867 (49.3%)	
Papers in Poster Session	728 (43.1%)	752 (40.7%)	861 (48.9%)	
Papers in Meetings	21 (1.2%)	34 (1.8%)	31 (1.8%)	
Papers Otherwise Presented	2 (0.1%)	5 (0.2%)	0 (0%)	

### **TRB Organizational Structure**

### **Divisions**

A Technical Activities
Groups
Sections
Committees

- **B** Studies and Special Programs
- **C** Admin and Finance
- **D** Cooperative Research Programs
- -- SHRP II
- -- Marine Board

### **Division A Technical Activities GROUPS**

Policy and Organization (Group B)
Planning and Environment (Group D)
Design and Construct (Group F)
Operations and Maintenance (Group H)
Legal Resources (Group L)
System Users Group (Group N)
Public Transport (Group P)
Rail (Group R)
Freight Systems (Group T)
Aviation (Group V)
Marine (Group W)

AB000: Policy and Organization Group
ABC00: Section - Management and Leadership
ABE00: Section - Transportation Policy
ABG00: Section - Research and Education
ABJ00: Section - Data and Information Systems

AD000: Planning and Environment Group
ADA00: Section - System Policy, Planning
ADB00: Section - Travel Analysis Methods
ADC00: Section - Environment and Energy
ADD00: Section - Social, Economic, and Cultural

### The Data Section

11 Committees , 1 Task Force, 2 Subcommittees

**ABJ10 National Transportation Data Requirements** 

**ABJ20 Statewide Transportation Data and Info Systems** 

**ABJ25T Task Force on the Traffic Monitoring Conferences** 

**ABJ30 Urban Transportation Data and Info Systems** 

**ABJ35 Highway Traffic Monitoring** 

**ABJ40 Travel Survey Methods** 

ABJ50 Information Systems and Technology

**ABJ60 Geographic Information Science and Applications** 

ABJ70 Artificial Intelligence and Advanced Computing

**ABJ80 Statistical Methodology and Software** 

**ABJ90 Freight Transportation Data** 

**ABJ95** Visualization in Transportation

### 252 ABJ30 Spectacular Data Mega Session

Poster Session 252 Spectacular Data Mega Session Monday, January 14, 2008, 9:30 AM - 12:00 PM, Hilton William L. Eisele, Texas Transportation Institute, presiding 24 Posters

Sponsored by:

Urban Transportation Data and Information Systems Committee (ABJ30) Data and Information Systems Section (ABJ00)

Travel Survey Methods Committee (ABJ40)

Statewide Transportation Data and Information Systems Committee (ABJ20) Geographic Information Science and Applications Committee (ABJ60) Library and Information Science for Transportation Committee (ABG40)

Sensor Locations on a Network to Predict Travel Times (08-0798) - C1
Pitu B. Mirchandani, University of Arizona
Yang He, University of Arizona

Work and Home Location: Possible Role of Social Networks (08.3073) - D10
Nebiyou Yonas Tilahun, University of Minnesota, Twin Cities
David Matthew Levinson, University of Minnesota, Twin Cities

Data and Information
ABJ00 Systems Section Executive
Board (Members Only)

367 ABJ00 Findability of Transportation Information

Traffic Monitoring
ABJ25T Conference (NATMEC) Task
Force (Members Only)

Urban Transportation Data
ABJ30 and Information Systems
Committee

Retreat

NYMTC Search Engines Invisible Web

Aug. 6-8, 2008

**Retreat** 



### Poster Session

Communicating Transportation Concepts to the Public Monday, January 14, 2008, 2:30 PM - 5:00 PM, Hilton

Alex Regiec, Winnipeg Transit, Canada

Marcy S. Schwartz, CH2M Hill, presiding

Sponsored by:

Planning and Environment Group (AD000)



Note: The winners of the "Communicating with John and Jane Public" competition will be presented winner will make a short presentation on his or her communication idea.

Designing for Sustainable Transportation and Transit in Winnipeg (P08-1307) - L1 Bjorn Radstrom, Winnipeg Transit, Canada Jeannette Montufar, University of Manitoba, Canada

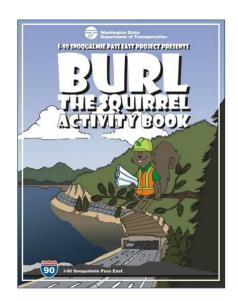
Rachel♦s Drive ♦ Computer Animation and Video for HOT Lanes (P08-1308) - L2

Melissa Loomis, Washington State Department of Transportation Jamie Holter, Washington State Department of Transportation Trent Rickman, Washington State Department of Transportation Bob Hamilton, King County Multi-Media Carol Hunter, Washington State Department of Transportation

Street Capacity Exercise ♦ UnJAM 2025 (P08-1309) - L3

Harrison B. Rue, Thomas Jefferson Planning District

Little Cottonwood Canyon Accident Analysis (P08-1310) - L4





http://www.wsdot.wa.gov/Projects/I90/burl

### **Tuesday - January 15**

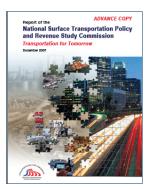
National Transportation Data
ABJ10 Requirements and
Programs Committee

AP000 Transit Caucus

661 Technology Innovations in ADC20 Monitoring Traffic and Air Pollution

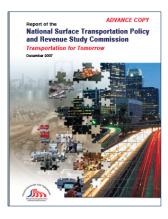
ABJ30 Advances on the Urban

Retreat



### http://www.transportationfortomorrow.org





Where will we be in 50 years?

How will we get there? What's Next?

### Wednesday - January 15

**681** ABJ30 Travel Data Users Forum: How Will the Changing Cost of Energy Affect Personal Travel?

E0000 Chairman's Luncheon

David Greene
Chuck Purvis
Nathan Erlbaum
Steve Polzin

**David Garder** 

# Going nowhere? Will high energy prices change U.S. travel? David L. Greene Corporate Fellow Oak Ridge National Laboratory 87th Annual Meeting of the TRB January 16, 2008 Washington, DC

### **David Greene, Oak Ridge National Laboratories**

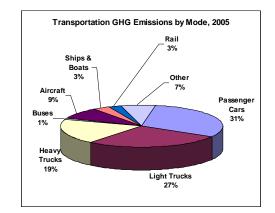
**Set the Stage** 

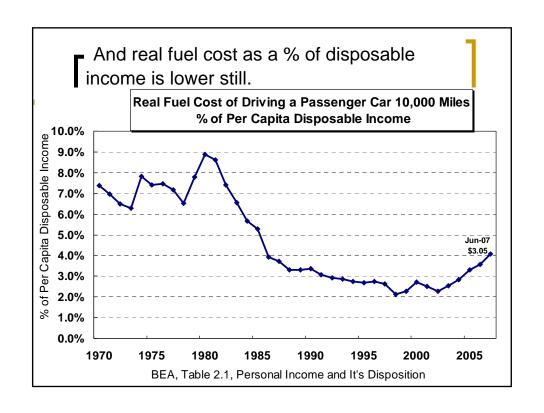
Economics of oil pricing

World and US oil consumption

Resources and Reserves

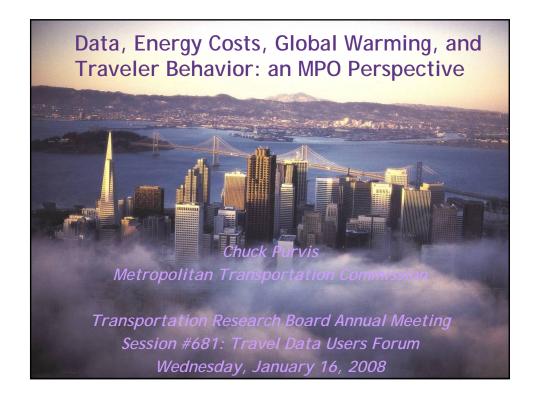
**The Carbon Footprint** 





## What will we change?

- Travel
- Energy Efficiency
- Carbon Intensity of Energy
- All of the above?



### **Presentation Overview**

### **Non-Attainment Area MPO Requirements**

- Air Quality Conformity Analysis
- Latest Planning Assumptions

### California MPO Requirements / Legislation

- California Environmental Quality Act (CEQA)
- California's Global Warming Solutions Act of 2006 (AB32)
- Pavley Bill of 2002 (AB1493)

### MTC's Vision 2035 Analysis (Fall 2007)

- Pricing, Land Use, Network Alternatives & Scenarios
- Regional CO<sub>2</sub> Target

### **Current & Future Data Needs**

- NHTS, CEX, revival of RTECS (Residential Trans Energy Consumption Surveys)
- MPO Travel Behavior Surveys

### METROPOLITAN TRANSPORTATION COMMISSION

### **Data Needs to Support Analysis**

### **Vehicle Acquisition Modeling**

- Duration Choice Modeling
- When do households choose to replace a household vehicle?
- If gas prices were to escalate, say, to \$5.00 per gallon, would households accelerate their vehicle replacements?

### **Vehicle Ownership Modeling**

- Discrete Choice Models
- How many vehicles does a household choose to own/lease?
- Need for simple, disaggregate choice models for use in planning charrettes, as well as more elaborate model systems

### **Vehicle Use Modeling**

- Model form?
- Need for simple, disaggregate choice models for use in planning charrettes

### Metropolitan Transportation Commission

# Energy Price and Travel Behavior

Nathan Erlbaum

NYS Department of Transportation

nerlbaum@dot.state.ny.us

518-457-2967

### Recap

- History:
  - Changes come out of discretionary travel
- NHTS 2001
  - Discretionary and maintenance activities are 60+% of the pie
- Travel demand 2004 date
  - Apparent dampening trend
  - Underlying economic uncertainty?

### Recap

- Its not gasoline price
  - No elastic effects identifiable
- Revenue forecasts
  - Over estimate, if based on simple trends
- Capital program expenditures
  - Subject to fuel price escalation and volatility
  - Difficult to forecast
  - Hard to budget for
  - Increasing at a rapid rate

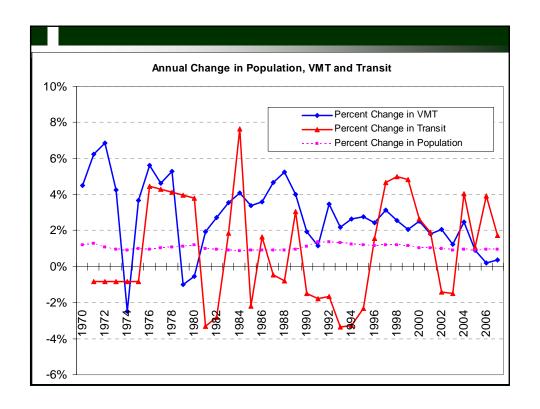
### Is Transit Part of the Equation?

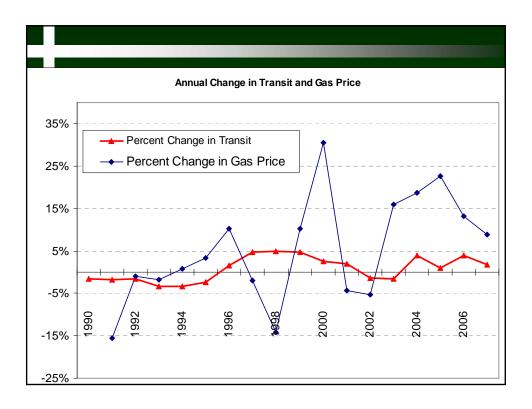
Travel Data Users Forum: How Will the Changing Cost of Energy Affect Personal Travel?

Session 681 Wednesday, January 16, 2008, 10:15 AM - 12:00 PM, Hilton

Steven E. Polzin, PhD CUTR, USF







# Challenges of Determining Fuel Price Impacts

- Detailed analysis is only possible at local level and then may be impossible due to data/resource constraints.
- Extremely difficult to factor out economic, service, fare, marketing, demographic or other confounding factors.



### What Additional Data Would Help

- Aggregate transit use data is old
- APC data can provide more specific trip length data for analysis
- A basis for normalizing to adjust for local fuel costs, population growth, service supply, fare levels, economic activity, etc.



# Can Transit Secure an Efficiency Advantage?

- New CAFE standards
- ◆ Improving transit efficiency
  - Vehicle technology and fuel (vehicle life cycle)
  - ◆ Service speed
  - ◆ Service productivity
  - ◆ Matching vehicle/mode to market
  - ◆ Disciplining the provision of amenities





### Travel Data Users Forum: How Will the Changing Cost of Energy Affect Personal Travel

### View from a Traffic Data Perspective

Presented by: Dave Gardner - Ohio DOT



TRE

87th Annual Meeting January 13-17, 2008, Washington D.C.

# Data Collection – Types of Counts





TRE

87th Annual Meeting January 13-17, 2008, Washington D.C.

### Data Collection – Types of Counts









87th Annual Meeting January 13-17, 2008, Washington D.C.

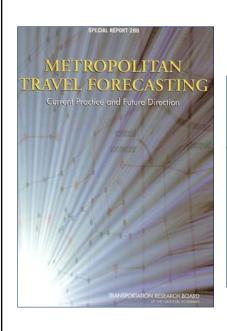
### **Reporting**

- Annual Average Daily Traffic (AADT)
- Vehicle Volume Data
- Vehicle Classification Data
- Adjustment Factors
- Various Summary Reports

  - DailyWeekly
  - Annual
  - By direction, by lane



87th Annual Meeting January 13-17, 2008, Washington D.C.



### http://TRBcensus.com

ABJ30 Census for Transportation
Planning Subcommittee,
ABJ30(1)

Metropolitan Travel
Forecasting: Current
Practice and Future
ADB00 Direction--A Report of the
Transportation Research
Board of the National
Academies

# Data is an issue But what data?





You need to help us make the case for data

# Ed Christopher FHWA Resource Center 708-283-3534 edc@EdTheFed.com